



## LNP-0315

Catalog Number	Packaging Size
LP008-1	1 mL
LP008-2	5 mL
LP008-3	10 mL
LP008-4	50 mL

Storage upon receipt: -20°C

**LNP-0315** is a lipid nanoparticle (LNP) formulated with ALC-0315, DSPC, Cholesterol, and ALC-0159. **LNP-0315** is formulated at optimal molar ratio for efficient delivery of mRNA-based vaccines.

**LNP-0315** is supplied at 10 mg/mL stock solution in ethanol.

**For research use only.**

### General Protocol for LNP-siRNA/mRNA Formulations

1. Prepare the siRNA or mRNA solution in 50 mM sodium acetate buffer (pH 5.0). The concentration should be adjusted based on the weight ratio of LNP : siRNA/mRNA.
2. The siRNA or mRNA solution is combined with LNP-0315 at a ratio of 3:1 (aqueous : ethanol) using a microfluidic mixer (Precision Nanosystems, Vancouver, BC). If no microfluidic mixer available, the siRNA or mRNA solution is combined with LNP-0315, and stirred at room temperature for 30 min.
3. Formulations are dialyzed against PBS (pH 7.4) in dialysis cassettes for 24 h.
4. Formulations are concentrated using Amicon ultra centrifugal filters (EMD Millipore, Billerica, MA).
5. The concentrates are passed through a 0.22- $\mu$ m filter, and store at 4°C until use.